

07/25/2006

7590

Fort Collins, CO 80527-2400

P.O. Box 272400

HEWLETT-PACKARD COMPANY Intellectual Property Administration

United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexadra, Virginia 22313-1450
www.uknto.per

ATTORNEY BOCKET NO.	CONFIRMATION NO.		
10002669-1	6164		
EXAMINER			
SALL, EL HADJI MALICK			
ART UNIT	PAPER NUMBER		
2157			

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/751,009	DAOUD ET AL.			
Office Action Summary	Examiner .	Art Unit			
	El Hadji M. Sall	2157			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 27 A	Responsive to communication(s) filed on <u>27 April 2006</u> .				
2a)⊠ This action is FINAL . 2b)☐ Thi	This action is FINAL . 2b) ☐ This action is non-final.				
• • •	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
 4) Claim(s) 1-5,9 and 14-18 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-5,9 and 14-18 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
9) The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date		Patent Application (PTO-152)			

2.

DETAILED ACTION

1. This action is responsive to the correspondence filed on April 27, 2006. Claims 1-5, 9, 14-15 and 17-18 are pending. Claims 1-5, 9, 14-15 and 17-18 represent apparatus and method for identifying a requested level of service for a transaction.

Claim Rejections - 35 USC § 102

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Application/Control Number: 09/751,009 Page 3

Art Unit: 2157

3. Claims 1, 3, 4, 5 and 9 are rejected under 35 U.S.C. 102(e) as being unpatentable over Bearden et al. U.S. 6,871,233.

Bearden teaches the invention as claimed including method and apparatus for use in specifying and insuring service-level quality of service in computer networks (see abstract).

As to claim 1, Bearden teaches an apparatus for identifying a requested level of service for a transaction, comprising:

computer readable storage media (figure 3, item 301); and computer readable program code stored in said storage media, comprising:

- a) program code for prompting a user to select a requested level of service for said transaction (column 1, lines 54-67; column 4, lines 20-25);
- b) program code for assigning said requested level of service to said transaction (column 2, line 3-7).

As to claim 3, Bearden teaches an apparatus, as in claim 1, further comprising:

- a) program code for selecting a backup level of service (figure 4; column 5, line 45 to column 6, line 24, Bearden discloses if the QoS exceeds the selected QoS goal, a set of actions is executed to reduce the network resources); and
- b) program code for assigning said backup level of service to said transaction (figure 4, item 402; column 6, lines 6-7).

As to claim 4, Bearden teaches an apparatus, as in claim 1, wherein said requested level of service is a predefined service category (column 3, lines 43-47).

As to claim 5, Bearden teaches an apparatus for identifying a requested level of service for a transaction, comprising:

computer readable storage media (figure 3, item 301); and computer readable program code stored in said storage media, comprising:

- a) program code for selecting said requested level of service for said transaction, said request level of service being based on a user identification (column 1, lines 54-67; column 4, lines 20-25; Column 2, lines 8-11);
- b) program code for assigning said requested level of service to said transaction (column 2, line 3-7).

As to claim 9, Bearden teaches a method for requesting a level of service for a transaction on a network, comprising:

selecting said requested level of service for said transaction via a user interface (column 1, lines 54-67; column 4, lines 20-25); assigning said requested level of service to said transaction (column 2, line 3-7).

4. Claims 14, 15, 17 and 18 are rejected under 35 U.S.C. 102(e) as being unpatentable over Davies et al. U.S. 6,483,805.

Application/Control Number: 09/751,009

Art Unit: 2157

Davies teaches the invention as claimed including Internet differentiated services service for transaction applications (see abstract).

As to claim 14, Davies teaches an apparatus for routing a transaction over a network based on a requested level of service associated with said transaction, comprising:

a number of computer readable storage media (column 7, line 55); and computer readable program code stored in said number of storage media, comprising:

- a) program code for selecting said requested level of service for said transaction (column 7, lines 47-59);
- b) program code for assigning a service tag to said transaction, said service tag including said requested level of service, and said program code assigning parts of said service tag at more than one point on said network (column 6, line 66 to column 7, line 6; column 8, line 62 to column 9, line 4).
- c) reading said requested level of service from said service; and d) directing said transaction over said network based on said requested level of service read from said service tag (column 7, lines 34-45).

As to claim 15, Davies teaches an apparatus, as in claim 14, wherein said transaction is directed over said network to a device best providing said requested level of service (column 7, lines 41-45, Davies discloses applying different treatments

to different classes at different classes quality of service can be obtained for each class (i.e. every QoS request is forwarded to the proper destination or "device")).

As to claim 17, Davies teaches an apparatus, as in claim 14, wherein said service tag is read by program code at more than one point on said network (column 7, lines 35-9).

As to claim 18, Davies teaches an apparatus, as in claim 14, further comprising program code for changing said requested level of service included on said service tag (column 7, lines 19-34, Davies discloses excess of the agreed rate or offering inferior service and mutating the marking rate to an alternate value).

5. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bearden U.S. 6,871,233 in view of Davies U.S. 6,483,805.

Bearden teaches the invention substantially as claimed including method and apparatus for use in specifying and insuring service-level quality of service in computer networks (see abstract).

As to claim 2, Bearden teaches an apparatus, as in claim 1.

Bearden fails to teach said transaction is a packetized signal comprising at least a data packet, and wherein a service tag is associated with said data packet by said program code for assigning said requested level of service, said service tag including said requested level of service.

However, Davies teaches Internet differentiated services service for transaction applications. Davies teaches said transaction is a packetized signal comprising at least a data packet, and wherein a service tag is associated with said data packet by said program code for assigning said requested level of service, said service tag including said requested level of service (column 6, line 66 to column 7, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bearden in view of Davies to provide said transaction is a packetized signal comprising at least a data packet, and wherein a service tag is associated with said data packet by said program code for assigning said requested

Application/Control Number: 09/751,009 Page 8

Art Unit: 2157

level of service, said service tag including said requested level of service. One would be motivated to do so to allow indicating the class of the traffic (column 7, line 6).

7. Response to Arguments

Applicant's arguments filed 04/27/06 have been fully considered but they are not persuasive.

(A) As to claims 1 and 5, Applicants argue that neither of applicants' claims 1 or 5 contains the limitation a) that is referenced by the Examiner in the above excerpt. It appears that the Examiner has formed this limitation by combining the limitations a) found in applicants' claims 1 and 5. However, the Examiner's above limitation a) is not found in either of applicants' claims. It is therefore believed that the Examiner's rejection of claims 1 and 5 is improper, does not set forth a prima facie basis for rejecting these claims, and should be withdrawn. Regardless of the above deficiency in the Examiner's rejection, and in the interest of pursing a rapid conclusion to prosecution, applicants note that 1) with respect to claim 1, Bearden fails to show "a) program code for prompting a user to select a requested level of service for said transaction...", and 2) with respect to claim 5, Bearden fails to show "a) program code for selecting said requested level of service for said transaction, said requested level of service being based on a user identification..."

In regards to point (A), examiner respectfully disagrees.

except the extra limitation in claim 5, which is "said request level of service being based on a user identification". For purpose of more clarity, Examiner is rejecting both claims 1 and 5 separately with the same references since the reference still reads on the claims.

In column 1, lines 55-65, Bearden discloses allowing a user to specify a parameter for predefined types of service-level QoS goals (i.e. "prompting a user to select a requested level of service for said transaction" is inherently taught by Bearden).

In addition to the above findings, in column 2, lines 8-11, Bearden discloses QoS goals are updated by adding, redefining, or removing a service-level QoS goal as requested by an administrator (i.e. an administrator is a user identified as an administrator, which is an explicit teaching of "said requested level of service being based on a user identification")

(B) As to claims 1 and 5, applicants argue that in Bearden the client is not prompted to "select a requested level of service" for any particular transaction, but is only prompted to specify a QoS goal for all transactions.

In regards to point (B), examiner respectfully disagrees.

Limitations such as "select a requested level of service" for any particular transaction is not in the claims. Besides, if the client is only prompted to specify a QoS goal for all transactions in Bearden's as stated by Applicant, "prompting a user to select a requested level of service for said transaction" is taught as well.

(C) As to claim 1, Applicants argue that with respect to claim 3, the Examiner asserts that Bearden teaches "program code for selecting a backup level of service" in FIG. 4, and in col. 5, line 45 - col. 6, line 24. Applicants disagree. The Examiner's cites only refer to allocating and de-allocating network resources to achieve a single QoS goal (or set of goals). Applicants cannot find any mention of anything corresponding to a "backup level of service".

In regards to point (C), examiner respectfully disagrees.

Column 6, lines 1-7, Bearden discloses determining and executing a set of actions to reduce network resource if the delivered QoS exceeds the selected QoS goal (i.e. Examiner construed this limitation as "backup level of service" since they have the same functionality).

(D) As to claim 14, Applicants argue that Applicants fail to appreciate the relevance of the cited reference and find no teaching or suggestion of the claimed limitation.

In regards to point (D), examiner respectfully disagrees.

Column 6, line 63 to column 7, line 8, Davies discloses Both DS Edge and DS Interior Devices in a given DS Domain must implement a consistent set of forwarding treatments which are known as Per Hop Behaviours (PHBs). The DS architecture supports enhanced Quality of Service (QoS) for Internet Protocol (IP) services by means of marking each individual packet used to deliver data across an IP network with a code comprising a small number of bits. Every traffic aggregate which passes through

a DS node is marked with a DS codepoint (6 bit number) which indicates the class of the traffic. The codepoint is used (for example using a mapping table) to select the PHB to which the traffic is subjected as it passes through a node (i.e. inherently the same as "selecting said requested level of service for transaction").

(E) As to claim 14, Applicants disagree that Davies teaches b) program code for assigning a service tag to said transaction, said service tag includes said requested level of service, and said program code assigning parts of said service tag at more than one point on said network. Furthermore, Applicants states that claim 14 recites "assigning a service tag to [a] transaction".

In regards to point (E), examiner respectfully disagrees.

Column 6, line 66 to column 7, line 6, Davies discloses the DS architecture supports enhanced Quality of Service (QoS) for Internet Protocol (IP) services by means of marking each individual packet used to deliver data across an IP network with a code comprising a small number of bits (i.e. "assigning a service tag to a transaction"). Every traffic aggregate which passes through a DS node is marked with a DS codepoint (6 bit number) (i.e. "service tag") which indicates the class of the traffic.

(F) As to claim 14, Applicants disagree that Davies teaches c) reading said requested level of service from said service; and d) directing said transaction over said network based on said requested level of service read from said service tag.

Art Unit: 2157

Furthermore, Applicants argue that Applicants' claim 14 teaches the reading of a level of service from a transaction's service tag and directing the transaction accordingly, whereas Davies routes packets. Davies' purpose for placing "a small number of bits" on a packet is to lump certain "bits" into classes. The classes are then subject to class-specific routing. Routing is the passive execution of processes to allow a packet to reach its intended destination. Directing, as in claim 14, actively determines where the transaction is to go.

In regards to point (F), examiner respectfully disagrees.

Column 7, lines 34-45, Davies discloses Routers which process the packets as they are forwarded across the IP network inspect the code and treat each packet marked with the same value in the same way when determining the priority or preference to give to those packets on the next hop of their path through the network. Each set of similarly-marked packets constitutes an class, and by applying different treatments to different classes a different quality of service can be obtained for each class. For example, access to a portion of the network may be refused to traffic in a given class which exceeds, in some measurable way, a previously agreed contract typically known Service Level Agreement (SLA). Just as Applicants acknowledge that Davies routes packets while applicants' claim 14 teaches directing the transaction accordingly. Examiner is pointing out Applicant to www.answers.com for definition of router, which the following: A network device that forwards packets from one network to another. Based on internal routing tables, routers read each incoming packet and decide how to forward it (i.e. directing the transaction). To which interface on the router

outgoing packets are sent may be determined by any combination of source and destination address as well as current traffic conditions. It is clear that the routers of Davies "read the level of service from a transaction's service tag and directing the transaction accordingly".

(G) As to claim 14, Applicants argue that the references lack any suggestion to be combined, and such a combination would be counterintuitive.

In regards to point (G), examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, on column 6, lines 66 to column 7, line 3, Davies discloses The DS architecture supports enhanced Quality of Service (QoS) for Internet Protocol (IP) services by means of marking each individual packet used to deliver data across an IP network with a code comprising a small number of bits. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bearden in view of Davies to provide said transaction is a packetized signal comprising at least a data packet, and wherein a service tag is associated with said data packet by said program code for assigning said requested

Application/Control Number: 09/751,009 Page 14

Art Unit: 2157

level of service, said service tag including said requested level of service. One would be motivated to do so to allow indicating the class of the traffic (column 7, line 6).

5. Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 571-272-4010. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-4010.

Application/Control Number: 09/751,009

Art Unit: 2157

Page 15

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

El Hadji Sall

Patent Examiner

Art Unit: 2157

SUPERVISORY PATENT EXAMINER
TECHNIC JOST CENTER 2100